

Fig. 1

Data Flow Process and Interface

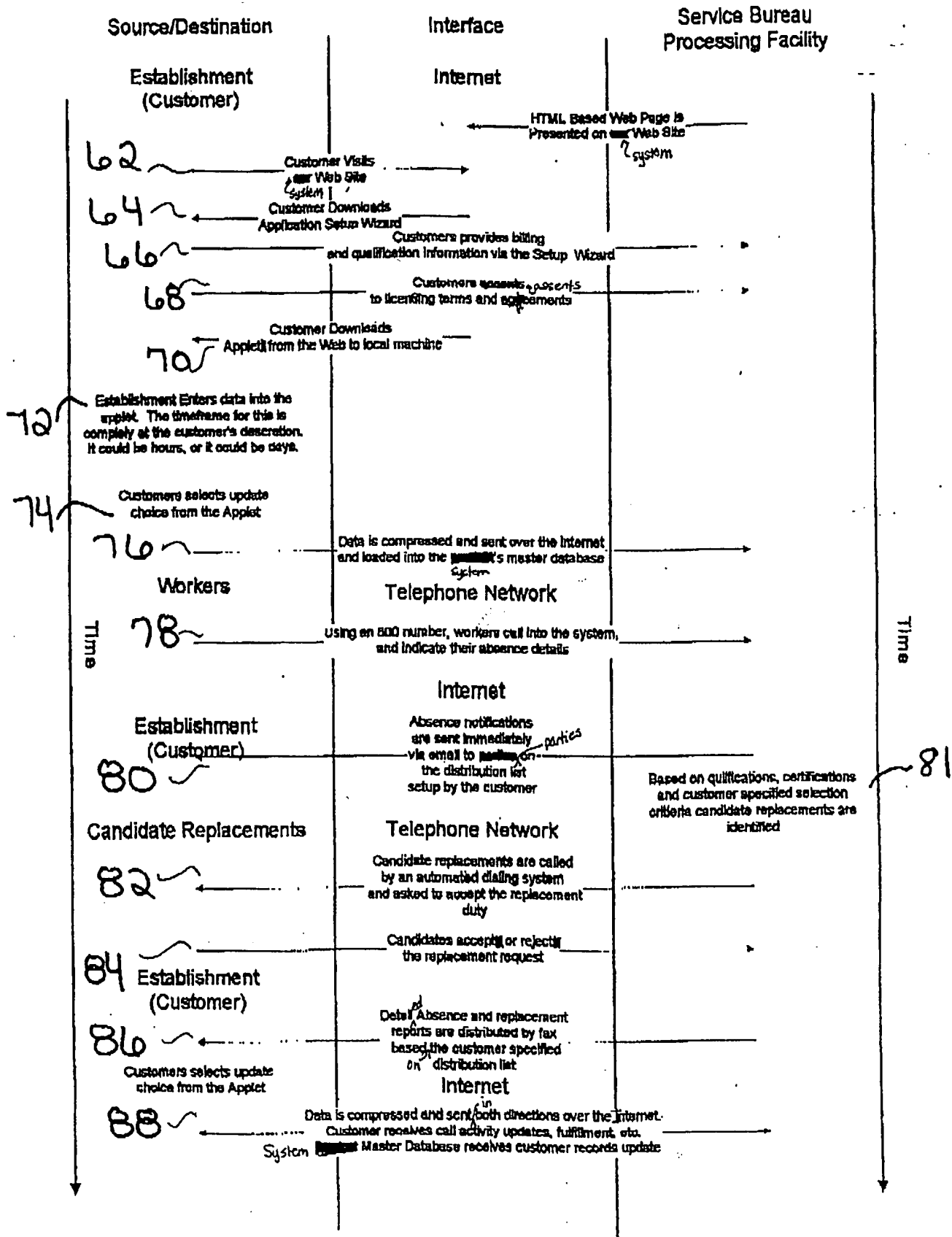


Fig. 2

Figure 3

90 →

STAFF	
Name	- 92
Title	- 94
Social Security Number	- 96
Pin	- 98
Cross reference to billing contact	- 100
Certification(s)	- 102
Substitute preferences	- 104
Schedule manipulation	- 106
Absence record	- 108
School reference	- 110
District reference	- 112
County reference	- 114
E-mail address	- 116
Fax number	- 118
Room/Office number	- 120
Special flag for recorded messages	- 122
Entitlement balances	- 124
Availability	- 126
Call time preferences	- 128

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Figure 4

130



Business Data	
Billing address	- 132
Mailing address	- 134
Billing contact	- 136
Emergency contact Evening Weekend Business	- 138
Phone number	- 140
Fax number	- 142
E-mail	- 144
PO #	- 146
Options turned on	- 148

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Figure 5

150 ↗

Pick-Lists	
Field preferences	
Required	-152
Visible	
Default data	
Field data	
Type	-154
Certification	-156
Entitlement types	-158
People	-160
Schools	-162
District	-164

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Figure 6

166 →

School Data	
Name	- 168
Code	- 170
Type	- 172
Principal	- 174
Fax	- 176
Assign fax list	- 178
Phone	- 180
Secretary	- 182
Assign substitute	- 184
Assign staff	- 186
Record/Play	- 188

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Figure 7

190 →

County Data	
Name	- 192
Code	- 194
State	- 196
Associate districts	- 198
Assign substitutes	- 200

Figure 8

202 →

District Data	
Name	- 204
Code	- 206
District address	- 208
Phone	- 210
Fax	- 212
Assign fax list	- 214
Administrator/Board secretary	- 216
Associate schools	- 218
Assign substitutes	- 220
Assign staff	- 222
Record/Play	- 224

Figure 9

226 →

Preferences
Options
Calling numbers
Select internet/intranet calling profiles
Password
Key value

- 228

Figure 10

230 →

Reports	
Acceptance/refusal history	- 232
Call History	- 234
Unfulfilled	- 236
Teacher manifest Trend analysis	- 237
Substitute manifest	- 238
School manifest	- 240
Substitute performance Acceptance rating Flexibility rating Trend analysis	- 242
Staff attendance	- 244
Staff calendars	- 246
Assignment reports School District County	- 248

Figure 11

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Wizard	
Phone	- 252
Emergency phone	- 254
Contact	- 256
Billing address	- 258
District	- 260
Title	- 262
Number of teachers (approx.)	- 264
Number of support staff (approx.)	- 266
Fax number	- 268
E-mail address optional	- 270
Billing contact optional	- 272

004125-10159

ABSENTEE REPORT

DATE: 1/8/98

TIME: 14:40:08

Name: Smith, John, T. Social Security#: 005-75-2243 Phone #: (609)-555-1111 Title: Social Studies Time: 14:39:50 Location: Howard
Date: 1/8/98
Type: Sick
F/H Day: Half Day/PM

SUBSTITUTE ASSIGNMENT REPORT

DATE: 1/8/98

TIME: 17:08

Name: Smith, John, T.
Title: Social Studies gr 8
Location: Howard

SSN: 005-75-2243
School ID: 011
School: 50 South School Street

Substitute Information

Name: Smith, Charles
Contact Date: 1/8/98

SSN: 005-76-2214
Time: 17:06

CALL HISTORY REPORT

DATE: 1/8/98

TIME: 17:08

Name: Smith, John, T.
Date: 1/8/98
Date: 1/8/98
Date: 1/8/98

SSN: 005-75-2243
Time: 17:04
Time: 17:05
Time: 17:06

Line: Answer
Line: Answer
Line: Answer

Status: No Contact Sub: Smith, Mark, C.
Status: Rejected Sub: Jones, Pat, B.
Status: Accepted Sub: Smith, Charles, D.

UNFULFILLED SUBSTITUTE ASSIGNMENT REPORT

DATE: 1/8/98

TIME: 19:10

Name: Hitchens, Jack, R.
Title: English gr 11
Location: Blair

SSN: 008-75-2278
School ID: 012
School: 123 South Main Street

Figure 17

States	Events					
	Start	Receive a call	Receive Valid Input	Receive Invalid Input	Timeout	Max Retries Reached
ST = State Transition						
Telephony Application						
Teacher Call-in						
Initial	Prompt for SS Number	Take phone offhook; Generate "Start" Event	ST: MainMenu	ST: ErrorState	ST: Hangup	N/A
MainMenu	"1"Record Absence; "2"Listen to Entitlement Day Balances; "3"Special Instructions	N/A	"1"Pressed ST: Whenstep1; "2"Pressed, Entitlements	Play Error Message; Generate Start Event	Play Error Message; Generate Start Event	ST: Goodbye
Whenstep1	"1" Today; "2"Another Day	N/A	"1" ST: Shift; "2" ST: WhenAnotherDay	Play Error Message; Generate Start Event	Play Error Message; Generate Start Event	ST: Goodbye
WhenAnotherDay	Prompt for day of the month followed by the "#" sign	N/A	ST: Shift	Play Error Message; Generate Start Event	Play Error Message; Generate Start Event	ST: Goodbye
Shift	"1" Full Day; "2"Half day AM; "3"Half day PM;	N/A	ST: AbsenceType or if required ST: StartTime	Play Error Message; Generate Start Event	Play Error Message; Generate Start Event	ST: Goodbye
StartTime	Prompt for a military time	N/A	ST: AbsenceType	Play Error Message; Generate Start Event	Play Error Message; Generate Start Event	ST: Goodbye
AbsenceType	List Valid Absence Types from database	N/A	ST: ConfirmAbsence or if required ST:RecordInstructions	Play Error Message; Generate Start Event	Play Error Message; Generate Start Event	ST: Goodbye
RecordInstructions	Play instructions for recording a message	N/A	ST: ConfirmAbsence	Play Error Message; Generate Start Event	Play Error Message; Generate Start Event	ST: Goodbye
ConfirmAbsence	Replay contents of absence, prompt user to confirm;	N/A	"1"Pressed, ST: CheckComplete; "2"Pressed, ST: WhenAnotherDay	Play Error Message; Generate Start Event	Play Error Message; Generate Start Event	ST: Goodbye
CheckComplete	Press "1"Complete call and get confirmation number; "2"Enter an additional absence day;	N/A	"1"Pressed, ST: Goodbye; "2"Pressed, ST:WhenAnotherDay	Play Error Message; Generate Start Event	Play Error Message; Generate Start Event	ST: Goodbye
Entitlements	List Entitlement Day Balances, ST: MainMenu	N/A	N/A	N/A	N/A	N/A

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ErrorState	Play standard error message; ST: Goodbye	N/A	N/A	N/A	N/A	N/A
Hangup	Hangup Phone; ST: End	N/A	N/A	N/A	N/A	N/A
Goodbye	Play goodbye message; ST: Hangup	N/A	N/A	N/A	N/A	N/A

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Figure 178

States		Events				
ST = State Transition	Start	Receive a call	Receive Valid Input	Receive Invalid Input	Timeout	Max Retries Reached
School Administrator Call-in						
MainMenu	Press "1" School Menu; Press "2" Entitlement Types Menu	N/A	"1" Pressed ST: RecordSchoolMenu; "2" Pressed ST: RecordEntTypesMenu	Play Error Message; Generate Start Event	Play Error Message; Generate Start Event	ST: Goodbye
RecordSchoolMenu	Prompt for valid School Recording ID	N/A	ST: RecordSchool, or if "*" pressed ST: MainMenu	Play Error Message; Generate Start Event	Play Error Message; Generate Start Event	ST: Goodbye
RecordSchool	Play existing recording, if exists then prompt "1" to Record new prompt, "*" to return to School Menu	N/A	"1" Pressed, record/verify prompt, ST: RecordSchoolMenu; "*" ST: RecordSchoolMenu	Play Error Message; Generate Start Event	Play Error Message; Generate Start Event	ST: Goodbye
RecordEntTypesMenu	Prompt for valid Entitlement Type Recording ID	N/A	ST: RecordEntTypes, or if "*" pressed ST: MainMenu	Play Error Message; Generate Start Event	Play Error Message; Generate Start Event	ST: Goodbye
RecordEntTypes	Play existing recording, if exists then prompt "1" to Record new prompt, "*" to return to Entitlement Types Menu	N/A	"1" Pressed, record/verify prompt, ST: RecordEntTypesMenu; "*" ST: RecordEntTypesMenu	Play Error Message; Generate Start Event	Play Error Message; Generate Start Event	ST: Goodbye
ErrorState	Play standard error message; ST: Goodbye	N/A	N/A	N/A	N/A	N/A
Goodbye	Thank caller for using system; ST: Hangup;	N/A	N/A	N/A	N/A	N/A
Hangup	Hangup Phone ST: End	N/A	N/A	N/A	N/A	N/A

Figure 1

States		Events				
ST = State Transition	Start	Receive a call	Receive Valid Input	Receive Invalid Input	Timeout	Max Retries Reached
FrontLine Administration Call-in						
RecordFilesMenu	Prompt for the recording ID of the message file	N/A	ST: RecordFiles	Play Error Message; Generate Start Event	Play Error Message; Generate Start Event	ST: Goodbye
RecordFiles	Play existing recording, if exists then prompt "1" to Record new prompt, "#" to return to Record Files Menu	N/A	"1" Pressed, record/verify prompt, ST: RecordFiles; "#" ST: RecordFiles	Play Error Message; Generate Start Event	Play Error Message; Generate Start Event	ST: Goodbye
ErrorState	Play standard error message; ST: Goodbye	N/A	N/A	N/A	N/A	N/A
Goodbye	Thank caller for using system; ST: Hangup;	N/A	N/A	N/A	N/A	N/A
Hangup	Hangup Phone ST: End	N/A	N/A	N/A	N/A	N/A

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Figure 1

States	Events					
	Start	Receive a call	Receive Valid Input	Receive Invalid Input	Timeout	Max Retries Reached
ST = State Transition						
Substitute Call-out						
308 MakeTheCall	Dial the telephone number; ST: CallAnalysis	N/A	N/A	N/A	N/A	N/A
309 CallAnalysis	Determine how the call was or was not answered	N/A	Person Answers; ST: Identify	Person does not answer;	N/A	N/A
310 Identify	Prompt for SS Number or PIN Number	N/A	ST: PresentRequest	Generate Start Event	N/A	ST: Goodbye
311 PresentRequest	Play request, prompt substitute to "1"Replay; "2"Accept, "3"Reject	N/A	"1"Replay, Generate Start-Event; "2" ST: AcceptRequest; "3" ST: RejectRequest	Play Error Message; Generate Start Event	Play Error Message; Generate Start Event	ST: Goodbye
312 RejectRequest	"1" Reject w/No more calls; "2"Reject allowing for additional calls	N/A	ST: Goodbye	Play Error Message; Generate Start Event	Play Error Message; Generate Start Event	ST: Goodbye
313 AcceptRequest	Play confirmation number; ST: Goodbye	N/A	N/A	N/A	N/A	N/A
314 ErrorState	Play standard error meesge; ST: Goodbye	N/A	N/A	N/A	N/A	N/A
315 Hangup	Hangup Phone ST: End	N/A	N/A	N/A	N/A	N/A
316 Goodbye	Thank substitute for using system; ST: Hangup;	N/A	N/A	N/A	N/A	N/A

Figure 13

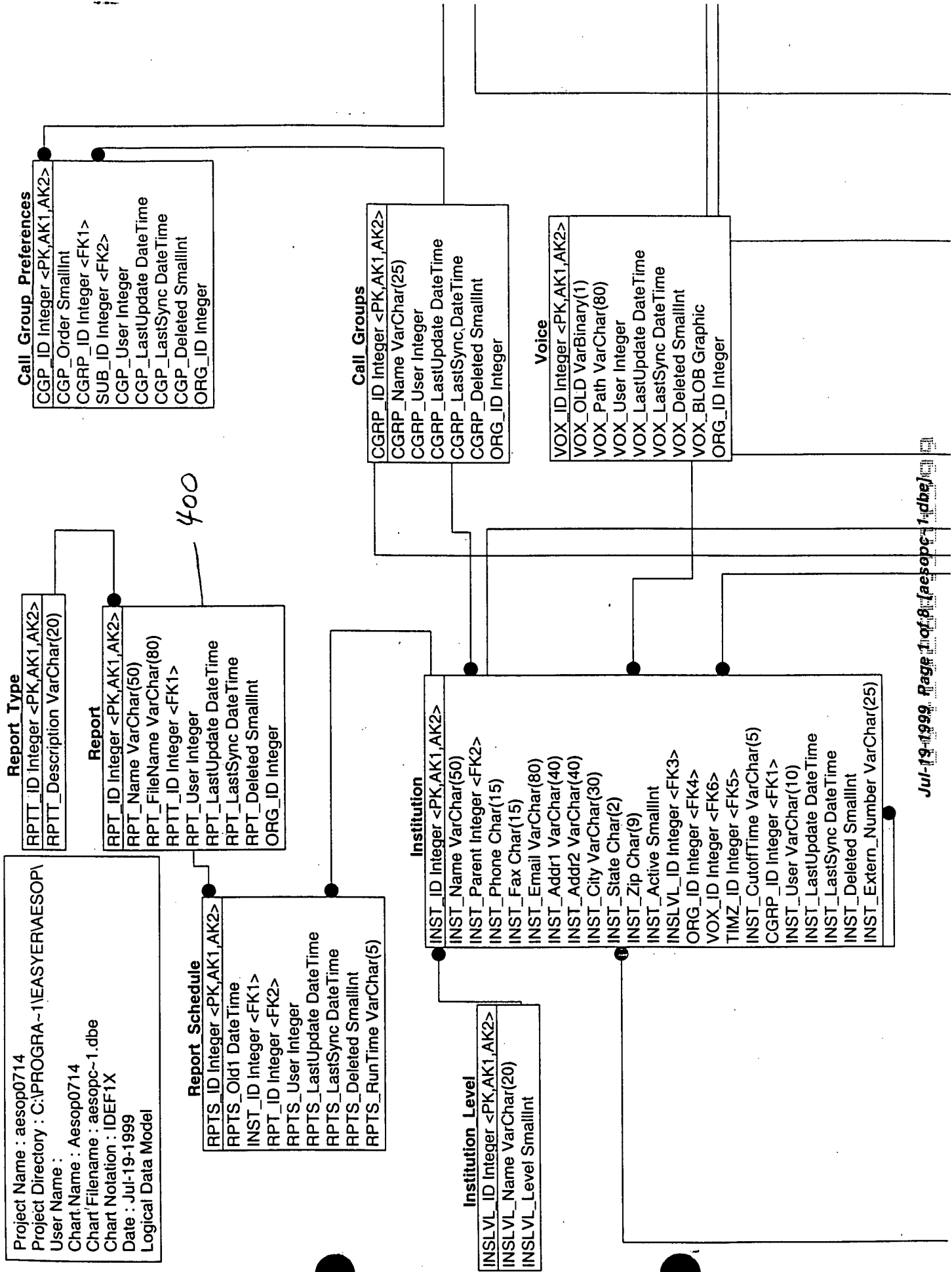
States	Events					
	Start	Receive a call	Receive Valid Input	Receive Invalid Input	Timeout	Max Retries Reached
Fax Call-out						
317 MakeTheCall	Call FaxNumber ST: CallAnalysis	N/A	N/A	N/A	N/A	N/A
318 CallAnalysis	Determine if Fax Answered	N/A	Fax Answered ST: FaxSend	Fax did not Answer ST: Hangup	N/A	N/A
319 FaxSend	Send Fax ST: End					
320 ErrorState	Play standard error message; ST: Goodbye	N/A	N/A	N/A	N/A	N/A
321 Goodbye	Thank substitute for using system; ST: Hangup;	N/A	N/A	N/A	N/A	N/A
322 Hangup	Hangup Phone ST: End	N/A	N/A	N/A	N/A	N/A

665101-99261460

Figure 13F
Synchronization
Client to Server

Client	Events									
States	Have Data	Don't Have Data	File Created	Connect FTP	Did Not Connect to FTP	File not there	Max Tries	Startup	Bad format	Save
323 Extract	Create file ST: Send	Create File ST: Send								
324 Send			Create FTP Session; Send File	Verify file was sent ST: Recieve; Else ST: Error			Error			
325 Receive						Check for file If pres ST: Import Else: Wait	Error			
326 Import						ST		Opens files; Verfy file format	Refuse all changes	Save Changes
327 Cleanup								Moyes files to archive; Sets last sync dates for all files		
Error										
Server	Events									
States	File Found	Startup								
328 Wait	Create File ST: Import Object									
329 Import Object		Opens; Verifys; Reads; Saves or discards;								
330 Extract		Create export file; ST:Send								
331 Send		Close file; copies to FTP site								

Figure 14A



401

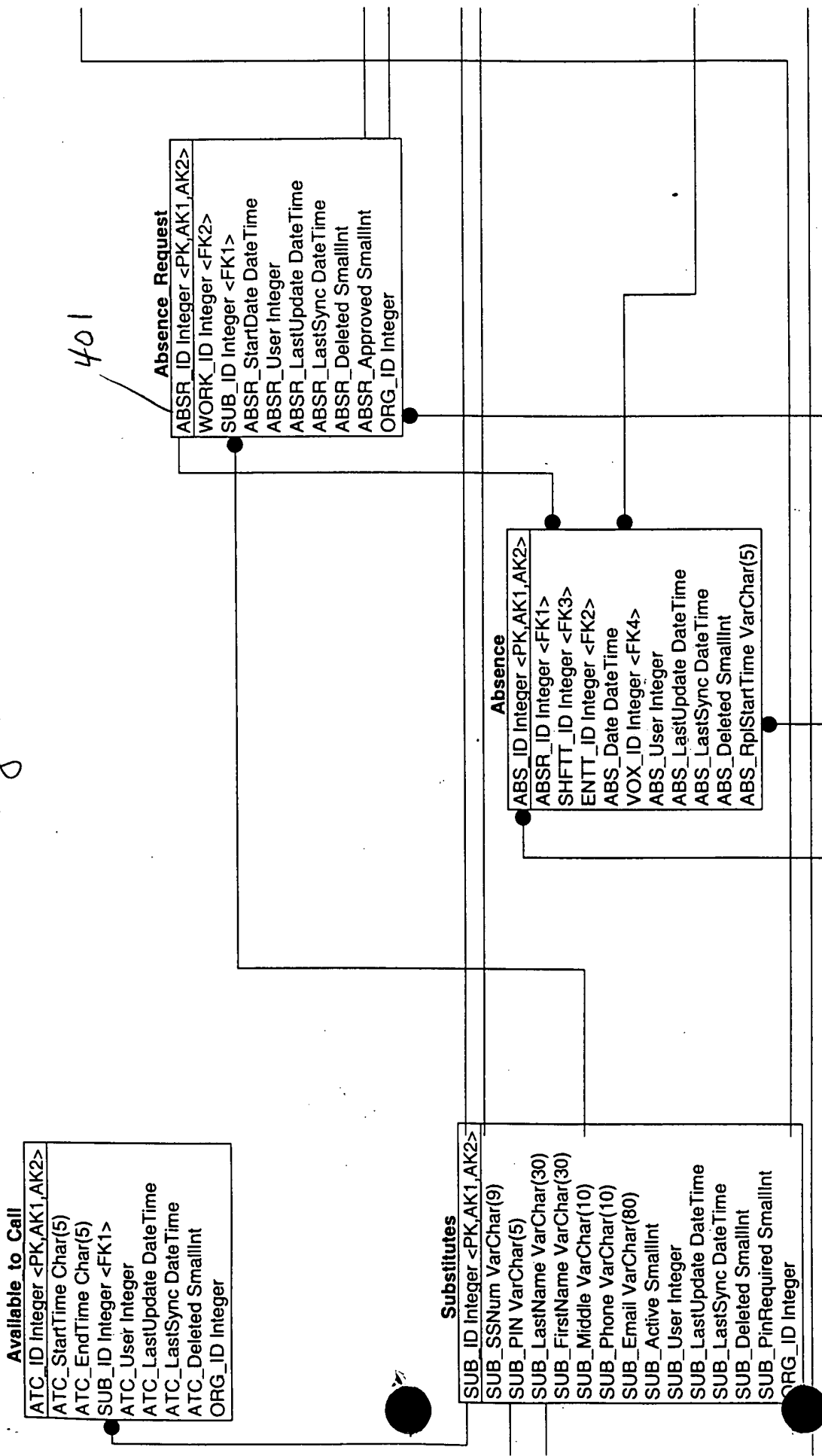
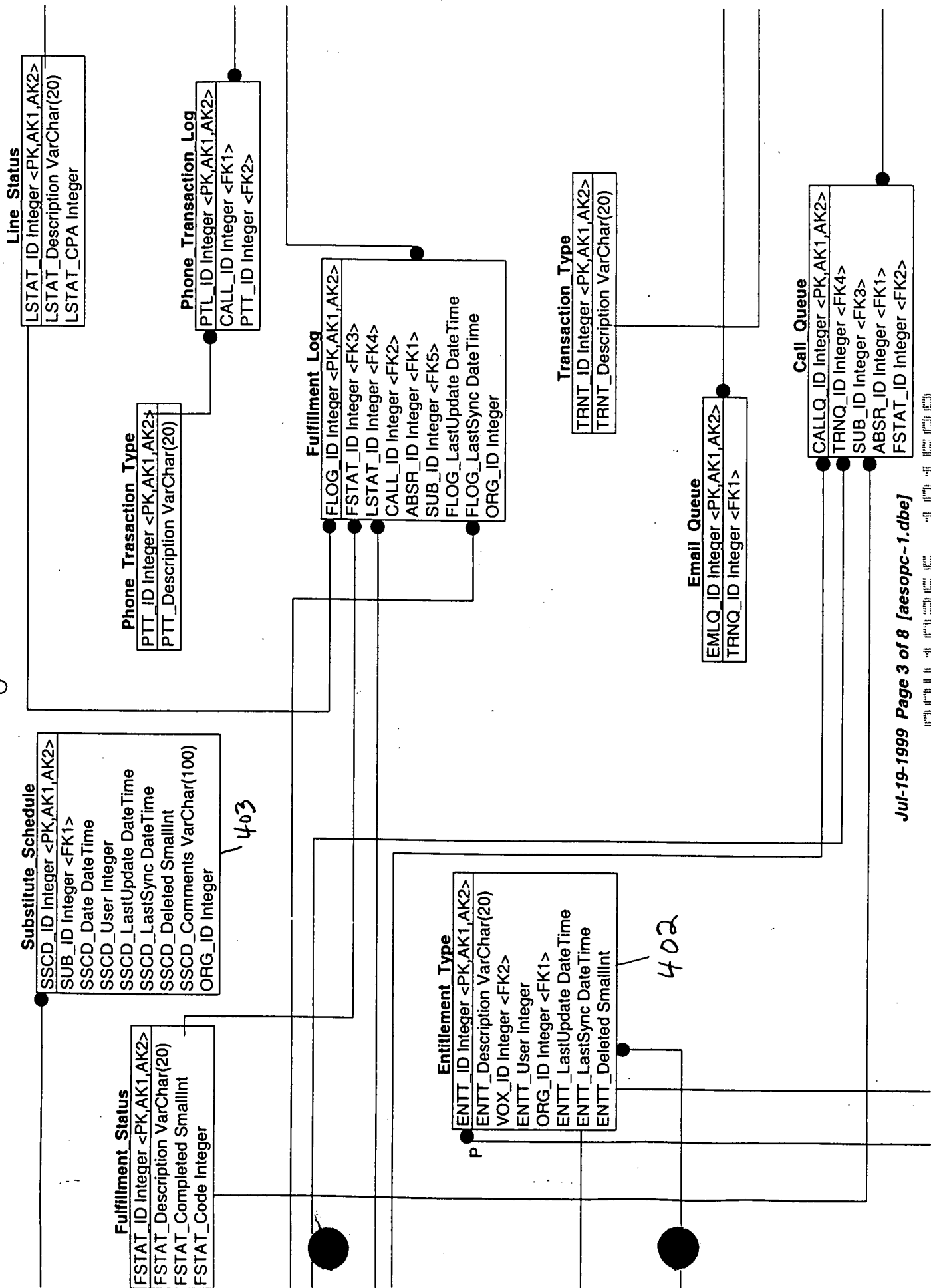


Figure 14-C



三



Figure 14-E

Organization	
ORG_ID Integer <PK,AK1,AK2>	
ORG_Active SmallInt	
ORG_Name VarChar(50)	
ORG_Street1 VarChar(40)	
ORG_Street2 VarChar(40)	
ORG_City VarChar(30)	
ORG_State Char(2)	
ORG_ZIP Char(9)	
ORG_Phone Char(15)	
ORG_Fax VarChar(15)	
ORG_Email VarChar(80)	
ORG_PINOld VarChar(1)	
ORG_ApproxTeacher Integer	
ORG_ApproxStaff Integer	
ORG_ContactFirstName VarChar(30)	
ORG_ContactMiddleName VarChar(10)	
ORG_ContactLastName VarChar(30)	
ORG_ContactTitle VarChar(30)	
ORG_ContactPhone VarChar(15)	
ORG_ContactFax VarChar(15)	
ORG_ContactEmpID VarChar(9)	
ORG_ContactEmail VarChar(80)	
ORG_ContactComments VarChar(80)	
ORG_User Integer	
ORG_LastUpdate DateTime	
ORG_LastSync DateTime	
ORG_Deleted SmallInt	
ORG_PIN VarChar(5)	
TIMZ_ID Integer <FK1>	
ORG_ShowHostBalances SmallInt	
ORG_LastEntitlementImportDate DateTime	

Organization Call Times	
OCT_ID Integer <PK,AK1>	
ORG_ID Integer <FK1>	
OCT_StartTime Char(5)	
OCT_EndTime Char(5)	
OCT_User Integer	
OCT_LastUpdate DateTime	
OCT_LastSync DateTime	
OCT_Deleted SmallInt	

Time Zone	
TIMZ_ID Integer <PK,AK1>	
TIMZ_Description VarChar(30)	
TIMZ_ShortName VarChar(10)	
TIMZ_OffsetOld DateTime	
TIMZ_Offset Float	

Worker	
WORK_ID Integer <PK,AK1,AK2>	
WORK_EmpID VarChar(9)	
WORK_PIN VarChar(5)	
WORK_LastName VarChar(30)	
WORK_FirstName VarChar(30)	
WORK_Middle VarChar(10)	
WORK_PINRequired SmallInt	
WORK_NeedsFulfillment SmallInt	
WORK_Title VarChar(30)	
WORK_EmployStartDate DateTime	
WORK_ReportLocation VarChar(20)	
WORK_Phone VarChar(15)	
WORK_Email VarChar(80)	
WORK_Active SmallInt	
WKT_ID Integer <FK4>	
CGRP_ID Integer <FK1>	
VOX_ID Integer <FK3>	
INST_ID Integer <FK2>	
WORK_User Integer	
WORK_LastUpdate DateTime	
WORK_LastSync DateTime	
WORK_Deleted SmallInt	
WORK_MsgRequired SmallInt	
WORK_DefStartTime VarChar(5)	

Skills	
SKL_ID Integer <PK,AK1,AK2>	
SKL_CODE VarChar(10)	
SKL_Description VarChar(30)	
SKL_User Integer	
SKL_LastUpdate DateTime	
SKL_LastSync DateTime	
SKL_Deleted SmallInt	
ORG_ID Integer	

Substitute Skill	
SSKL_ID Integer <PK,AK1,AK2>	
SUB_ID Integer <FK2>	
SKL_ID Integer <FK1>	
SSKL_User Integer	
SSKL_LastUpdate DateTime	
SSKL_LastSync DateTime	
SSKL_Deleted SmallInt	
ORG_ID Integer	

Entitlements

ENT_ID Integer <PK,AK1,AK2>
ENT_Old1 Integer
ENT_Old2 Integer
ENT_ID Integer <FK1>
WORK_ID Integer <FK2>
ENT_User Integer
ENT_LastUpdate DateTime
ENT_LastSync DateTime
ENT_Deleted SmallInt
ENT_Balance Float
ENT_Change Float
ORG_ID Integer

Fulfillment Skill Preferences

FSP_ID Integer <PK,AK1>
FSP_Description VarChar(20)
FSP_Value SmallInt
FSP_User Integer
FSP_LastUpdate DateTime
FSP_LastSync DateTime
FSP_Deleted SmallInt

Worker Skills

WRKS_ID Integer <PK,AK1,AK2>
WORK_ID Integer <FK2>
SKL_ID Integer <FK1>
WRKS_User Integer
WRKS_LastUpdate DateTime
WRKS_LastSync DateTime
WRKS_Deleted SmallInt
ORG_ID Integer

Fulfillment Skills

FSKL_ID Integer <PK,AK1,AK2>
WORK_ID Integer <FK3>
SKL_ID Integer <FK2>
FSP_ID Integer <FK1>
FSKL_User Integer
FSKL_LastUpdate DateTime
FSKL_LastSync DateTime
FSKL_Deleted SmallInt
ORG_ID Integer

Handwritten annotations: 406 (near Entitlements), 407 (near Fulfillment Skill Preferences), 408 (near Fulfillment Skills), 409 (near Worker Skills).

SECRET

Figure 14-6

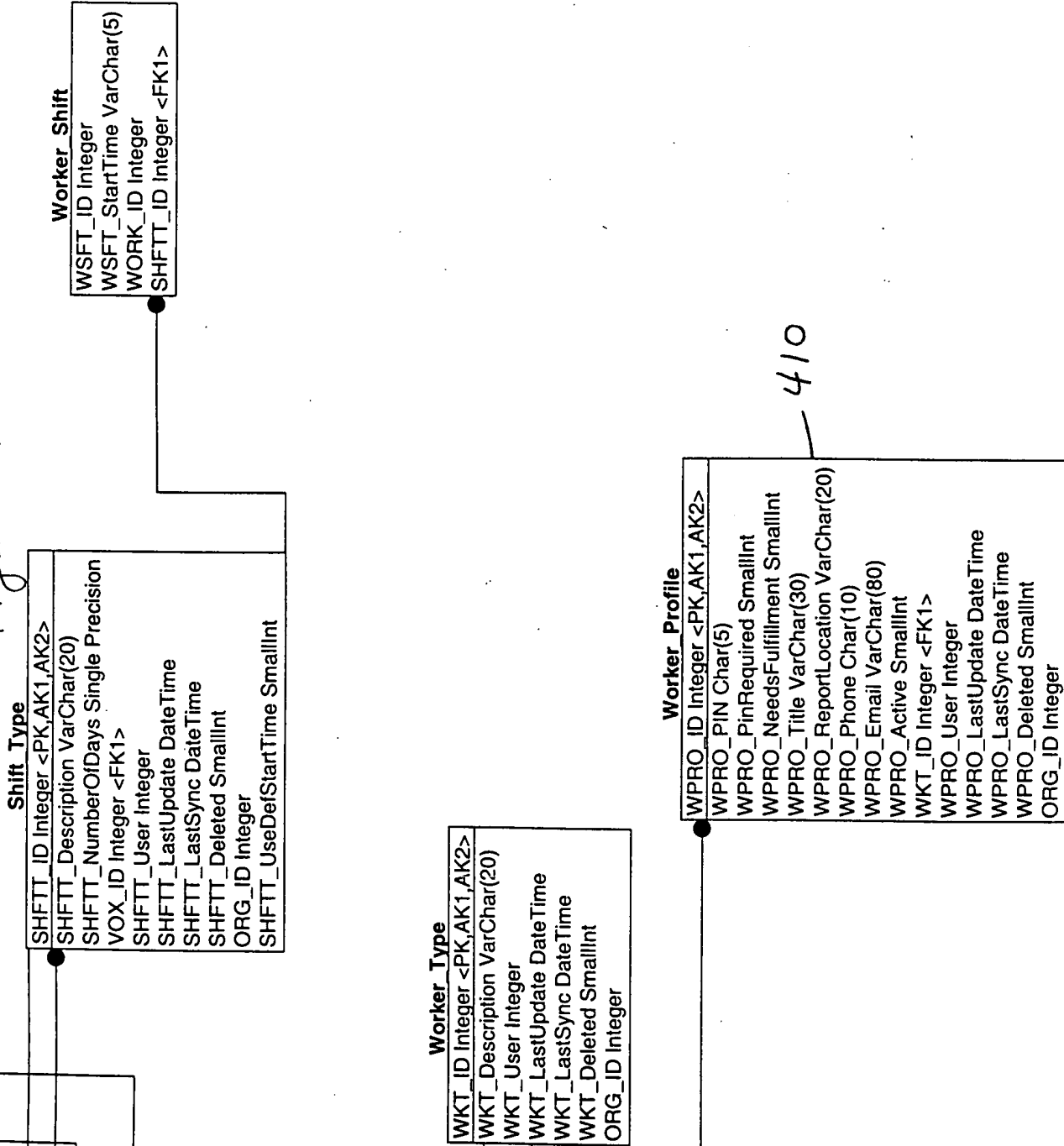


Figure 17-17

